Examiner: Ilia Ouspenski, Ph.D.

GAU: 1644 Page 2 of 8

IN THE CLAIMS:

1. (Currently Amended) A microparticle with a support structure and CD28-specific

superagonistic monoclonal antibodies (mAbs) bonded to the support structure, wherein the

diameter of the support structure is in the range from 0.1 µm to 100 µm, preferably in the range

from 1 µm to 20 µm, in particular in the range from 1 µm to 10 µm.

2. (Previously Presented) A microparticle according to claim 1, wherein the mAbs are

directly and preferably covalently bonded to the surface of the support structure.

3. (Previously Presented) A microparticle according to claim 1, wherein the mAbs are

indirectly bonded to the surface of the support structure by a spacer compound preferably

covalently bonded to the surface of the support structure.

4. (Previously Presented) A microparticle according to claim 3, wherein the spacer

compound is selected from the group consisting of "organic polymers, peptides, proteins, and

combinations of such substances".

5. (Previously Presented) A microparticle according to claim 1, wherein the surface of the

support structure is formed by an organic polymer, which is selected from the group consisting

Examiner: Ilia Ouspenski, Ph.D.

GAU: 1644 Page 3 of 8

of "polystyrene, polyurethane, polyester, polyvinylpyridine, polyvinylamine, polyethyleneimine,

chitosan, and mixtures of such polymers".

6. (Previously Presented) A microparticle according to claim 5, wherein the organic

polymer comprises a reactive group that is glycidylether.

7. (Previously Presented) A microparticle according to claim 5, wherein the organic

polymer is surface activated by treatment with an activation reagent, which preferably is p-

toluenesulfonyl chloride.

8. (Canceled)

9. (Previously Presented) A microparticle according to claim 1, wherein the surface of the

support structure (measured by means of the BET method) is 1 to 10, preferably 1 to 4 times the

geometric surface, assumed as a smooth sphere surface.

10. (Withdrawn) The use of microparticles according to claim 1 for the stimulation of blood

cells, in particular T lymphocytes, B lymphocytes, granulocytes, monocytes and/or

thrombocytes.

Examiner: Ilia Ouspenski, Ph.D.

GAU: 1644 Page 4 of 8

11. (Withdrawn) The use according to claim 10 for preparing a pharmaceutical composition

for the treatment of diseases with reduced blood cell counts, in particular reduced T lymphocyte

counts, or of immunopathologic diseases or for strengthening the immune reaction in case of

vaccinations, wherein a blood sample is taken from a patient, wherein as an option the blood

cells are isolated from the blood sample, wherein the blood cells are cultivated in vitro under

addition of a physiologically effective dose of microparticles, and wherein the thus obtained

blood cells are as an option galenically prepared for the injection or infusion.

12. (Withdrawn) The use according to claim 10 for preparing a pharmaceutical composition

for the treatment of diseases with reduced blood cell counts or of immunopathologic diseases or

for strengthening the immune reaction in case of vaccinations, wherein the microparticles are

galenically prepared preferably for the injection or infusion.

13. (Withdrawn) A method for preparing microparticles according to claim 1, comprising the

following steps:

a) microparticles with a surface formed by one or several different organic polymers are

prepared,

b) as an option, the surface is activated,

c) the thus obtained microparticles are incubated with a solution containing CD28-

specific superagonistic mAbs, wherein the mAbs preferably are covalently bonded to the surface.

or

Examiner: Ilia Ouspenski, Ph.D.

GAU: 1644 Page 5 of 8

c') the thus obtained microparticles are firstly incubated with a solution containing a

spacer compound, wherein the spacer compound preferably is covalently bonded to the surface.

as an option followed by a washing step, and subsequently the microparticles with the bonded

spacer compound are incubated with a solution containing CD28-specific superagonistic mAbs,

wherein the mAbs are covalently or non-covalently bonded to the spacer compound, and

d) the thus obtained microparticles carrying CD28-specific superagonistic mAbs are

separated from the solution and as an option subjected to a washing step.

14. (New) A microparticle with a support structure and CD28-specific superagonistic

monoclonal antibodies (mAbs) bonded to the support structure, wherein the surface of the

support structure is formed by an organic polymer, which is selected from the group consisting

of "polystyrene, polyurethane, polyester, polyvinylpyridine, polyvinylamine, polyethyleneimine,

chitosan, and mixtures of such polymers".

15. (New) A microparticle according to claim 14, wherein the organic polymer comprises a

reactive group that is glycidylether.

16. (New) A microparticle according to claim 14, wherein the organic polymer is surface

activated by treatment with an activation reagent, which preferably is p-toluenesulfonyl chloride.

Examiner: Ilia Ouspenski, Ph.D.

GAU: 1644 Page 6 of 8

17. (New) A microparticle with a support structure and CD28-specific superagonistic

monoclonal antibodies (mAbs) bonded to the support structure, wherein the surface of the

support structure (measured by means of the BET method) is 1 to 10, preferably 1 to 4 times the

geometric surface, assumed as a smooth sphere surface